

**REMARKS**

By this amendment, claims 18-23 are pending, in no claims are canceled, currently amended, or newly presented. Claims 1-17 were previously canceled.

The final Office Action mailed June 15, 2005 rejected claims 18-23 under 35 U.S.C. § 102(b) as anticipated by *Huang* (US 6,194,998 B1).

Applicant respectfully traverses the outstanding rejection on the merits, as the claimed invention is patentably distinguishable over the applied art, as discussed below.

Applicant submits that *Huang* does not disclose all steps of the method claims as positively recited in claims 18 and 21. For example, independent claim 18 is drawn to a method “for replacing a valve stem,” and recites “**disconnecting a lead coupled to a valve pin disposed within the valve stem** from a terminal of a battery; **replacing the valve stem**; and **connecting a lead coupled to a valve pin disposed within the replaced valve stem** with a terminal of the battery.” Also, independent claim 21 is directed to a method “for replacing a valve stem assembly” and recites, “**disconnecting a valve pin disposed within the valve stem assembly from a lead** coupled to a terminal of a battery; **removing the valve stem assembly** from a valve stem attached to a wheel rim; **inserting a new valve stem assembly into the valve stem**; and **connecting a valve pin disposed within the new valve stem assembly to the lead** coupled to the terminal of the battery.”

The Office Action, on page 2, provides a general reference to FIG. 2, and argues that the stem body **80a** of the *Huang* device is the claimed lead, and the valve stem **80** as the claimed valve pin. Applicant respectfully submits that the Office Action improperly characterizes the teachings of *Huang* to satisfy the claimed features. First, the Examiner misconstrues the claim term “lead” in the context of the claims. Second, *Huang* does not disclose any methodology for “replacing a valve stem.”

In particular, the cited FIG. 2 and associated text, in relevant part (col. 4, lines 1-22), discloses the following (*Emphasis Added*):

**The valve stem 80 includes a stem body 80a that extends through the valve seat 81 and that is made from an electrically conductive material. The stem body 80a has a first end section disposed proximate to the outer end portion 71 of the valve housing 7, an intermediate section extending through the end wall 8100 of the cap body 810 and formed with a radial flange 800 for abutting against one side of the end wall 8100 that is disposed distal to the outer end portion 71 of the valve housing 7, and a second end section extending out of the valve seat body 811 and having a valve piece 801 connected thereto. The valve stem 80 further includes a coil spring 802 sleeved on the intermediate section of the stem body 80a and disposed in the valve seat 81. One end of the coil spring 802 abuts against the radial flange 800. The other end of the coil spring 802 abuts against the inner wall surface of the tapering end portion 8111 of the valve seat body 811. The coil spring 802 thus biases the stem body 80a such that the valve piece 801 closes sealingly an open end of the tapering end portion 8111 of the valve seat body 811, thereby blocking air flow through the valve seat 81. Due to the seal ring 82 and the valve piece 801, air in the tire 32 does not leak out of the valve housing 7.**

From the above passage, it is clear that the supposed “lead” **80a** is in fact a part of the valve stem **80**. The Examiner is attempting to read two separate claim elements (lead and valve pin) on one element – i.e., valve stem **80**. This construction is contrary to settled case law and reveals the unreasonableness of the Examiner’s interpretation. The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ 1566 (Fed. Cir. 1990).

*Huang* (col. 5: 40-col. 6: 58) further discloses the following (*Emphasis Added*):

When the battery housing 6 is mounted threadedly on the outer end portion 71 of the valve housing 7, the battery housing 6 is connected electrically to the valve housing 7 to connect the conductive wire 85 and, in turn, the pressure-sensing device 4 to the negative terminal side 52 of the battery cell 5. **At the same time, the second portion of the second battery contact 65 abuts against the stem body 80a of the valve stem 80, thereby connecting electrically the conductive wire 84 and, in turn, the pressure-sensing device 4 to the positive terminal side 51 of the battery cell 5 via the stem body 80a and the biasing stem 80'.** Electric power can thus be supplied to the pressure-sensing device 4 at this time.

When the stored power of the battery cell 5 has been used up, **the battery seat 62 can be removed from the battery housing 6 externally of the airtight chamber**

formed between the wheel rim 31 and the pneumatic tire 32 to replace the battery cell 5. Replacement of the battery cell 5 is thus facilitated in the power supply unit of the present invention.

Referring again to FIG. 2, in the first preferred embodiment, the valve housing 7 has the air valve member 8 and the biasing member 8' disposed therein. As such, in the event that the **air valve member 8 is defective and has to be replaced, electrical connection with the pressure-sensing device 4 need not be disturbed** since the **conductive wires 84, 85 are connected to the biasing stem 80'** of the biasing member 8' and the valve housing 7, respectively.

FIG. 7 illustrates the second preferred embodiment of a power supply unit according to the present invention. Unlike the previous embodiment, there is no biasing member 8'. **Thus, the conductive wire 84 is connected directly to the stem body 80a of the valve stem 80. Replacement of the battery cell 5 is still convenient to conduct in this embodiment since the battery housing 6 is disposed externally of the airtight chamber formed between the wheel rim 31 and the pneumatic tire (not shown).**

These passages would suggest to one of ordinary skill in the art that the conductive wire 84 can act as a lead. Hence, the interpretation adopted by the Examiner that the stem body 80a is a “lead” is without any technical support from *Huang*, but instead the stem body **80a** is contorted to equate to the claimed lead.

Furthermore, Applicant submits that *Huang* fails to teach “replacing a valve stem.” *Huang* merely provides a disclosure of “an **easy-to-replace power supply unit** for a pressure-sensing device” (col. 1, line 60 – col. 2, line 34). At best, *Huang* mentions that the air valve member 8 can be replaced if defective; however, this air valve member 8 is not the valve stem 80.

That is, *Huang* never discloses or suggests “replacing the valve stem,” and “connecting a lead coupled to a valve pin disposed within the replaced valve stem,” as positively recited in claim 18. Likewise, the steps of claim 21 are not disclosed in *Huang* – that of “removing the valve stem assembly”; “inserting a new valve stem assembly into the valve stem”; and “connecting a valve pin disposed within the new valve stem assembly.”

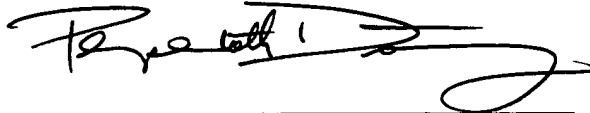
In the light of the above discussion, Applicant respectfully requests that the rejection under § 102(b) be withdrawn, as anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed within a prior art reference. Based on the foregoing, it is clear that prior art does not anticipate independent claims 18 and 21. Accordingly, claims 18 and 21, and corresponding dependent claims 19-20, and 22-23 should be indicated as allowable.

Therefore, the present application, as amended, overcomes the rejection of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date



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